AMENDMENT TO THE ABSTRACT

The following abstract will replace all prior versions of the abstract in the application:

ABSTRACT

A process for producing a light absorbing layer for thin-film solar cell that possesses a film structure having a constituent component of chalcopyrite compound ($Cu(In+Ga)Se_2$) uniformly distributed thereinside. There is provided a process for producing a light absorbing layer, ~~comprising (1)~~including the precursor forming step of superimposing on an Mo electrode layer, adjacent to the electrode layer, an In metal layer and a Cu-Ga alloy layer according to sputtering technique; ~~(2) the~~ a first selenization step of, while accommodating precursor-provided substrate ~~(1)~~ in an airtight space, introducing hydrogen selenide gas in the airtight space conditioned so as to range from room temperature to 250°C; ~~(3) the~~ a second selenization step of additionally introducing hydrogen selenide gas in the airtight space heated so as to range from 250° to 450°C; ~~(4) the~~ a third selenization step of, while causing the hydrogen selenide gas having been introduced up to the second selenization step to remain, heating the interior of the airtight space so as to range from 450° to 650°C and, within this range of temperature, performing heat treatment of the substrate; and ~~(5) the~~ a cooling step of cooling the substrate after the heat treatment.